

BIG MOVES OF MUTUAL FUNDS

THORSTEN LEHNERT*

April 2018

Abstract

Previous research suggests that short-sellers correctly anticipate that big moves by one or more mutual funds cause temporary price distortions. By moving in the opposite direction to those trades, short-sellers outsmart mutual funds. This appears to be healthy for the overall market, but mutual funds' vulnerability substantially reduces their profits. For informed traders, the equity lending market and the options market are substitutes for one another. In this paper, I empirically investigate how big moves of mutual funds affect the cross-section of option prices. Overall, I find strong empirical evidence for directional trading in index options. The flow-induced bearish trading activity of short-sellers is price destabilizing and greatly influences put and call option prices. Firstly, in line with the short-selling channel, inflows into mutual funds mainly impact the pricing of put options. The demand for out-of-the money put options leads to a significant drop in risk-neutral skewness. Secondly, inflows (outflows) affect the risk-neutral volatility negatively (positively); the impact on prices is consistent across put and call options. Thirdly, while the effect on risk-neutral skewness is associated with the unexpected component (based on same-day flows) only, the effect on risk-neutral volatility is associated with the unexpected and the expected component (based on prior days' trading). Finally, while the negative relationship of inflows on risk-neutral volatility and skewness is consistent over time, the effect of outflows on risk-neutral volatility is not observable in bearish markets.

Keywords: Mutual Funds, Big Moves, Index Options, Fund Flows, Short Sellers, Risk-neutral Skewness.

JEL-Classification: G12, C15

*Thorsten Lehnert is at the Luxembourg School of Finance, University of Luxembourg, 4, rue Albert Borschette, 1246 Luxembourg, Luxembourg, tel +352466644-6941; fax +352466644-6835. E-mail address: thorsten.lehnert@uni.lu.